

We claim:

1. A method of producing a laminate material comprising the steps of
  - a. providing a first flexible sheet material;
  - 5       b. providing a second flexible sheet material having a first surface and a second surface;
  - c. providing a forming surface having grooves formed therein;
  - d. providing a plurality of mating surfaces having fins positioned to fit within the grooves of said forming surfaces;
  - 10       e. forming successive nips between the forming surface and the mating surfaces wherein the fins of the mating surfaces enter the grooves of the forming surface at separate locations on the forming surface;
  - f. feeding said first flexible sheet material into the successive nips while maintaining the position of said first flexible sheet material with respect to said forming surface;
  - 15       g. stretching said first flexible sheet material a plurality of times along lines on the first flexible sheet material by the fins entering the forming surface grooves along with said first flexible sheet material within successive nips;
  - h. applying adhesive to said first flexible sheet material with a slot coat adhesive process; and
  - 20       i. joining the stretched first flexible sheet material in a face to face configuration to the first surface of the second flexible sheet material.
2. The method of claim 1 wherein the fins of said successive mating surfaces enter the grooves of respective successive nips to a different degree providing a different amount of stretch to said first flexible sheet material at different nips.
- 25       3. The method of claim 1 wherein said forming surface is a drum and said plurality of mating surfaces are satellite rolls positioned at different locations with respect to said drum.
4. The method of claim 1 wherein the first flexible sheet material is a nonwoven web.
- 30       5. The method of claim 1 wherein said first flexible sheet material is stretched in the cross-machine direction.
6. The method of claim 1 wherein said stretching is along lines having a frequency of about 3 per inch to about 15 per inch.
7. The method of claim 1 wherein said first flexible sheet material, prior to stretching, has a basis weight in the range of from about 10 gsm to about 150 gsm.
- 35       8. The method of claim 1 where the second flexible sheet material is a polymeric film

9. The method of claim 8 where the polymeric film is extensible.
10. The method of claim 8 where the polymeric film is breathable.
11. The method of claim 8 where the polymeric film is a multi-directional stretch film.
- 5 12. The method of claim 1 further including the step of stretching the second flexible sheet material in the machine direction before it is joined to the stretched first flexible sheet material.
13. The method of claim 1 where first flexible sheet material, after stretching, has a corrugated surface comprised of a series of surface contacting peaks separated by recessed troughs therebetween and is joined to the second flexible sheet material at discrete points comprising where the series of surface contacting peaks of the stretched first flexible sheet material contact the first surface of the second flexible sheet material.
- 10 14. The method of claim 13 where the adhesive is applied substantially to the series of surface contacting peaks of the first flexible sheet material.
- 15 15. A method of producing a laminate material comprising the steps of
- a. providing a first flexible sheet material;
  - b. providing a second flexible sheet material having a first surface and a second surface;
  - 20 c. providing a forming surface having grooves formed therein;
  - d. providing a plurality of mating surfaces having fins positioned to fit within the grooves of said forming surfaces;
  - e. forming successive nips between the forming surface and the mating surfaces wherein the fins of the mating surfaces enter the grooves of the forming surface at separate locations on the forming surface;
  - 25 f. feeding said first flexible sheet material into the successive nips while maintaining the position of said first flexible sheet material with respect to said forming surface;
  - g. stretching said first flexible sheet material a plurality of times in the cross-machine direction along lines on the first flexible sheet material by the fins entering the forming surface grooves along with said first flexible sheet material within successive nips, such that the resulting stretched first flexible sheet material has a corrugated surface comprised of a series of surface contacting peaks separated by recessed troughs therebetween ;
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h. applying adhesive to said first flexible sheet material with a slot coat adhesive process, where the adhesive is applied substantially to the surface contacting peaks of the first flexible sheet material; and

i. joining the stretched first flexible sheet material in a face to face configuration to the first surface of the second flexible sheet material at the discrete points where the surface contacting peaks of the first flexible sheet material contact the first surface of the second flexible sheet material.

16. The method of claim 15 where the first flexible sheet material is a nonwoven web.

17. The method of claim 15 where the second flexible sheet material is a polymeric film.

18. The method of claim 17 where the polymeric film is extensible.

19. The method of claim 17 where the polymeric film is breathable.

20. The method of claim 17 where the polymeric film is a multi-directional stretch film.

21. A laminate comprising:

a first flexible web having a corrugated surface comprised of a series of surface contacting peaks separated by recessed troughs therebetween, and

a second flexible web,

where the second flexible web is joined to the first flexible web in a face to face configuration at the discrete points where the surface contacting peaks of the first flexible web contact the polymeric film.

22. The laminate of claim 21 where the first flexible web is a nonwoven web.

23. The laminate of claim 21 where the second flexible web is a polymeric film.

24. The laminate of claim 23 where the polymeric film is extensible.

25. The laminate of claim 23 where the polymeric film is breathable.

26. The laminate of claim 23 where the polymeric film is a multi-directional stretch film.